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(54) Title: FLAVONOL EXPRESSING DOMESTICATED TOMATO AND METHOD OF PRODUCTION

(57) Abstract: The present invention includes non-transgenic domesticated tomato plants that express flavonols in the flesh and peel of the tomato fruit, and includes the seeds and fruits of such plants. The method of the invention includes assaying tomato plants for expression of one or more of the flavonol biosynthesis genes in the flesh and/or expression of CHI in the peel. The method of the invention includes selecting wild tomato species that express CHI in the fruit peel, and/or one or more genes of the flavonol biosynthesis pathway in the flesh, and introgressing the genetic factors responsible for this expression from the wild tomato species into a domesticated tomato plant using traditional breeding techniques.